

551,569

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number  
**WO 2004/096813 A1**

(51) International Patent Classification<sup>7</sup>: **C07D 491/04, A61P 31/00**

(21) International Application Number:  
PCT/GB2004/001687

(22) International Filing Date: 21 April 2004 (21.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0309506.4 25 April 2003 (25.04.2003) GB

(71) Applicants (for all designated States except US): **UNIVERSITY COLLEGE CARDIFF CONSULTANTS LIMITED** [GB/GB]; P.O. Box 497, 30-36 Newport Road, Cardiff CF24 0DE (GB). **REGA FOUNDATION** [BE/BE]; Minderbroedersstraat 10, B-3000 Leuven (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **McGUIGAN, Christopher** [GB/GB]; 2 Alfreda Road, Whitchurch, Cardiff CF4 2EH (GB). **BALZARINI, Jan** [BE/BE]; Kapeldreef 20, B-3001 Heverlee (BE). **DE CLERCQ, Erik** [BE/BE]; Parklaan 9, B-3360 Lovenjoel (BE).

(74) Agents: **HOWARD, Paul, Nicholas et al.**; Carpmiels & Ransford, 43-45 Bloomsbury Square, London WC1A 2RA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HETEROCYCLIC COMPOUNDS FOR USE IN THE TREATMENT OF VIRAL INFECTIONS

(57) Abstract: 6-substituted-3-substituted-3*H*-furo[2,3-*d*]pyrimidin-2-one and 6-substituted-2-substituted-furo[2,3-*d*]pyrimidine novel compounds are useful in the treatment of viral infection, in particular cytomegalovirus viral infection. The substituents are independently selected from alkyl, aryl, alkenyl and alkynyl. The preferred substituent at the 6 position is alkyl.



WO 2004/096813 A1